



# KÖLSCH OF THE TITANS

Fermentables					BJCP Style Guidelines	
Weight (lb)	Name			%		
8.42	US Pale 2-Row			87.9		
0.75	Carafoam			7.6		
0.42	Vienna Malt			4.5		
<b>Hop Additions</b>						
Stage/Time	Qty (oz)	Name		%AA	IBU	
Boil/60 min	0.52	Hallertaur		4.5	9.1	
Boil/15 min	0.41	Tettnanger		4.5	4.6	
Boil/5 min	0.37	Tettnanger		4.5	3	
<b>Yeast</b>						
Variety			Qty	Ferm Temp		
WLP029 – German Ale/Kölsch Yeast			1 package	65-69°F		
<b>Additives</b>						
Amount	Name			Stage/Time		
1 tsp/Tablet	Irish Moss/Whirlfloc			Boil/15 min		
1/2 tsp	Yeast nutrient			Boil/15 min		
1 vial	Clarity Ferm			End of boil		
1 vial	Brewzyme D			End of boil		
<b>Target Statistics</b>		<b>Brew Notes</b>			<b>Notes</b>	
<b>Batch Size</b>	5.5 gal	<b>Protein Rest Temp/Duration</b>	148°F/15 min		<p>This is a good example of a 2 stage mash process. The strategy utilized here is to hold the mash at temperatures that are more firmly in the ideal range for the two kinds of enzyme that make starch conversion possible. The first stage, the “protein rest,” focuses on breaking up longer chain protein. The brewer then increases the temperature to reach the “saccharification rest” wherein starches are converted into fermentable sugars. This strategy can reduce chill haze and be a more efficient conversion for high-adjunct recipes.</p>	
<b>OG</b>	1.050	<b>Sacch Rest Temp/Duration</b>	158°F/30 min			
<b>FG</b>	1.007	<b>Mash Duration</b>	30 min			
<b>~%ABV</b>	5.7	<b>Boil Volume</b>	6.5 gal			
<b>Efficiency</b>	73	<b>Boil Duration</b>	60 min			
<b>IBU</b>	15.8					
<b>SRM</b>	3.6					



**Kölsch** (5B)

Original Gravity: 1.044 – 1.050 SG  
Final Gravity: 1.007 – 1.011 SG  
Bitterness: 18 – 30 IBUs  
ABV: 4.4 – 5.2%  
SRM: 3 - 5

Overall Impression: A clean, crisp, delicately balanced beer usually with a very subtle fruit and hop character. Subdued maltiness throughout leads to a pleasantly well-attenuated and refreshing finish. Freshness makes a huge difference with this beer, as the delicate character can fade quickly with age. Brilliant clarity is characteristic.